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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/781,228	02/13/2001	Daniel Matter	004501-534	7955
21839	7590	06/03/2004	EXAMINER	
BURNS DOANE SWECKER & MATHIS L L P			DANG, HUNG Q	
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ALEXANDRIA, VA 22313-1404			PAPER NUMBER	

2635

DATE MAILED: 06/03/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/781,228

Applicant(s)

MATTER ET AL.

Examiner

Hung Q Dang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 November 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,7,9,11-13,17 and 19 is/are rejected.
- 7) ☒ Claim(s) 4-6,8,10,14-16,18 and 20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>5,7</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 6 is rejected under U.S.C. 112 second paragraph. Claim 6 contains the term "type", which renders the claim indefinite because it extends the scope of the expression and it is unclear what "type" was intended to convey. See MPEP § 2173.05(b).

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-3, 7, 9, 11-13, 17 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Owens U.S. Patent 5,172,039.

Regarding claims 1, 3, 11 and 13, Owens teaches an apparatus, in combination with a counter wheel, for capacitively determining a position of the counter wheel comprising (column 10, lines 25-56 and column 11 lines 1-13):

- fixed electrodes (Figure 11B, units 126) arranged at a distance from the counter wheel (Figure 11A, unit 108); and
- means for changing a capacitance on the basis of position, the means for changing the capacitance on the basis of position including a sequence of

measurement electrodes (Figure 11A, units 114) extending over a circumference of the counter wheel, and electrically nonconductive sections (Figure 11A, area 106 must be electrically nonconductive in order to electrically separate electrodes 114) arranged between said measurement electrodes.

Regarding claims 2 and 12, the fixed electrodes disclosed by Owens are also arranged along the circumference of the counter wheel.

Regarding claims 7 and 17, Owens also teaches an opposing electrode (Figure 11B, unit 128 or 129) which extends along at least half the circumference of the counter wheel at a distance therefrom.

Regarding claims 9 and 19, Owens also disclose the distance between the measurement electrodes and the fixed electrodes, which are respectively opposite them, according to the position of the counter wheel, is at least approximately the same (Figure 11A-B; clearly, the distance between the measurement electrodes 114 and the fixed electrodes 126, when the two plates are aligned, are approximately the same).

Allowable Subject Matter

5. Claims 4-6, 8, 10, 14-16, 18 and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claims 4 and 14, the prior arts of record fail to teach or suggest an apparatus, in combination with a counter wheel, for capacitively determining a position

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of the counter wheel as claimed in claim 1, wherein the counter wheel has a body made of an electrically conductive material having recesses which are distributed over the circumference and contain electrically nonconductive inserts.

Regarding claims 5 and 15, the prior arts of record fail to teach or suggest an apparatus, in combination with a counter wheel, for capacitively determining a position of the counter wheel as claimed in claim 1, wherein the fixed electrodes are combined in pairs, wherein all the measurement electrodes on the counter wheel are of the same length, and wherein each pair is of a common length which corresponds to the length of the measurement electrodes on the counter wheel.

Conclusion

6) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung Dang whose telephone number is 703-305-1836. The examiner can normally be reached on Monday through Friday from 8:30AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Horabik, can be reached on (703) 305-4704. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

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Hung Dang

5/20/2004

H.D.

HD

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